UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

26161 7590 10/20/2005

FISH & RICHARDSON PC
P.O. BOX 1022
MINNEAPOLIS, MN 55440-1022

EXAMINER	
OUSPENSKI, ILIA I	
ART UNIT	PAPER NUMBER
1644	

DATE MAILED: 10/20/2005

49

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/383,551	08/26/1999	TAKUYA TAMATANI	06501/039001	6738

TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR A CELL SURFACE MOLECULE MEDIATING CELL ADHESION AND SIGNAL TRANSMISSION, CELLS SECRETING SUCH ANTIBODIES, AND METHODS OF MAKING AND USING SUCH ANTIBODIES

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	$1400	$0	$1400	01/20/2006

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PTOL-85 (Rev. 07/05) Approved for use through 04/30/2007.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail **Mail Stop ISSUE FEE**
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

or Fax **(571) 273-2885**

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

26161 7590 10/20/2005

FISH & RICHARDSON PC
P.O. BOX 1022
MINNEAPOLIS, MN 55440-1022

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/383,551	08/26/1999	TAKUYA TAMATANI	06501/039001	6738

TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR A CELL SURFACE MOLECULE MEDIATING CELL ADHESION AND SIGNAL TRANSMISSION, CELLS SECRETING SUCH ANTIBODIES, AND METHODS OF MAKING AND USING SUCH ANTIBODIES

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	$1400	$0	$1400	01/20/2006

EXAMINER	ART UNIT	CLASS-SUBCLASS
OUSPENSKI, ILIA I	1644	530-387100

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.

☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

(1) the names of up to 3 registered patent attorneys or agents OR, alternatively, 1 _____

(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 2 _____ 3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are enclosed:

☐ Issue Fee

☐ Publication Fee (No small entity discount permitted)

☐ Advance Order - # of Copies _____

4b. Payment of Fee(s):

☐ A check in the amount of the fee(s) is enclosed.

☐ Payment by credit card. Form PTO-2038 is attached.

☐ The Director is hereby authorized by charge the required fee(s), or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. **Change in Entity Status** (from status indicated above)

☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27.

☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

The Director of the USPTO is requested to apply the Issue Fee and Publication Fee (if any) or to re-apply any previously paid issue fee to the application identified above.
NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature _____ Date _____

Typed or printed name _____ Registration No. _____

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/383,551	08/26/1999	TAKUYA TAMATANI	06501/039001	6738

26161 7590 10/20/2005

FISH & RICHARDSON PC
P.O. BOX 1022
MINNEAPOLIS, MN 55440-1022

EXAMINER	
OUSPENSKI, ILIA I	
ART UNIT	PAPER NUMBER
1644	

DATE MAILED: 10/20/2005

Determination of Patent Term Extension under 35 U.S.C. 154 (b)
(application filed after June 7, 1995 but prior to May 29, 2000)

The Patent Term Extension is 551 day(s). Any patent to issue from the above-identified application will include an indication of the 551 day extension on the front page.

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Extension is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571) 272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

PTOL-85 (Rev. 07/05) Approved for use through 04/30/2007.

Notice of Allowability	Application No.	Applicant(s)	
	09/383,551	TAMATANI ET AL.	
	Examiner	Art Unit	
	ILIA OUSPENSKI	1644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *06/21/2005*.

2. ☒ The allowed claim(s) is/are *37 – 54, 73 – 89, 100 – 114, 140 – 154, renumbered 1 - 115*.

3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☒ All b) ☐ Some* c) ☐ None of the:
      1. ☒ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 3/16/04.
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date *9/22/2005* .
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

48/I

DETAILED ACTION

1. Applicant's amendment, filed 08/09/2005, is acknowledged, and has been entered.

Claims 1 – 36, 55 – 72, 90 – 99, 115 – 139, and 155 – 164 have been cancelled.

Claims 215 – 391 have not been entered.

Claims 37 – 54, 73 – 89, 100 – 114, 140 – 154 are pending.

2. Applicant's IDS, filed 03/16/2004, is acknowledged and has been considered.

3. An Examiner's Amendment to the record appears below. Should the changes and/or additions be unacceptable to Applicant, an amendment may be filed as provided by 37 C.F.R. § 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the Issue Fee.

4. Authorization for cancellation of claims 55 – 72, 90 – 99, and 215 – 391 by Examiner's Amendment was given in a telephone interview with Jack Brennan on 09/22/2005. Claims 215 – 391 were introduced in Tamatani Preliminary Motion 2, but not entered (see Paper 116, mailed 11/01/2004) during Interference proceedings (Patent Interference No. 105,168).

Examiner's Amendment

In the Claims:

I

5. Claims 55 – 72, 90 – 99, and 215 – 391 have been cancelled.

In the Specification:

6. In the TITLE: The Title has been replaced with --ANTIBODIES TO JTT-1 PROTEIN, CELLS SECRETING SUCH ANTIBODIES, AND METHODS OF MAKING SUCH ANTIBODIES--

I2

See I1

Note: a complete listing of claims pending in the instant application following entry of this amendment is attached.

Reasons for Allowance

7. The following is an Examiner's Statement of Reasons for Allowance:

In view of Judgment issued in the instant Application by the Board of Patent Appeals and Interferences (Paper 144, mailed 06/21/2005; Patent Interference No. 105,168), the pending claims are determined to be allowable.

Claims 37 – 54, 73 – 89, 100 – 114, 140 – 154 are pending and allowed.

The prior art does not teach or suggest the claimed polypeptides, compositions, and methods of using the same.

8. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ILIA OUSPENSKI whose telephone number is 571-272-2920. The examiner can normally be reached on Monday-Friday 9 - 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Chan can be reached on 571-272-0841. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ILIA OUSPENSKI
Patent Examiner
Art Unit 1644

PHILLIP GAMBEL, PH.D
PRIMARY EXAMINER
TECH CENTER 1600
9/27/05

September 27, 2005

In re Appln. of Tamatani et al.
Application No. 09/383,551

PC 9/27/05

CLAIM ~~AMENDMENTS~~

1 ~~37~~. (Previously Presented) A purified non-hamster antibody or portion thereof that binds to a polypeptide consisting of SEQ ID NO:2.

2 ~~38~~. (Previously Presented) The antibody or portion thereof of claim 1 ~~37~~, wherein the antibody is monoclonal.

3 ~~39~~. (Previously Presented) The antibody or portion thereof of claim 1 ~~37~~, wherein the antibody is polyclonal.

I 1

4 ~~40~~. (Previously Presented) The antibody or portion thereof of claim 2 ~~38~~, wherein the antibody binds to the extracellular region of the polypeptide.

5 ~~41~~. (Previously Presented) The antibody or portion thereof of claim 2 ~~38~~, wherein the antibody is a human, mouse, rat, guinea pig, rabbit, dog, cat, pig, goat, horse or cow antibody.

6 ~~42~~. (Previously Presented) The antibody or portion thereof of claim 2 ~~38~~, wherein the antibody is a human, mouse or rat antibody.

7 ~~43~~. (Previously Presented) The antibody or portion thereof of claim 2 ~~38~~, wherein the antibody is chimeric.

8 ~~44~~. (Previously Presented) The antibody or portion thereof of claim 2 ~~38~~, wherein the antibody is humanized.

9 ~~45~~. (Previously Presented) The antibody or portion thereof of claim 2 ~~38~~, wherein the antibody is a human antibody.

12

48/I

In re Appln. of Tamatani et al.
Application No. 09/383,551

10 ~~46~~. (Previously Presented) A pharmaceutical composition comprising the antibody or portion thereof of claim ~~37~~ 1 and a pharmaceutically acceptable carrier.

11 ~~47~~. (Previously Presented) A pharmaceutical composition comprising the antibody or portion thereof of claim ~~38~~ 2 and a pharmaceutically acceptable carrier.

12 ~~48~~. (Previously Presented) A pharmaceutical composition comprising the antibody or portion thereof of claim ~~39~~ 3 and a pharmaceutically acceptable carrier.

13 ~~49~~. (Previously Presented) A pharmaceutical composition comprising the antibody or portion thereof of claim ~~40~~ 4 and a pharmaceutically acceptable carrier.

I1 CONT.

14 ~~50~~. (Previously Presented) A pharmaceutical composition comprising the antibody or portion thereof of claim ~~41~~ 5 and a pharmaceutically acceptable carrier.

15 ~~51~~. (Previously Presented) A pharmaceutical composition comprising the antibody or portion thereof of claim ~~42~~ 6 and a pharmaceutically acceptable carrier.

16 ~~52~~. (Previously Presented) A pharmaceutical composition comprising the antibody or portion thereof of claim ~~43~~ 7 and a pharmaceutically acceptable carrier.

17 ~~53~~. (Previously Presented) A pharmaceutical composition comprising the antibody or portion thereof of claim ~~44~~ 8 and a pharmaceutically acceptable carrier.

18 ~~54~~. (Previously Presented) A pharmaceutical composition comprising the antibody or portion thereof of claim ~~45~~ 9 and a pharmaceutically acceptable carrier.

55. (Previously Presented) A method of inhibiting activation of lymphocytes in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 46.

56. (Previously Presented) A method of inhibiting activation of lymphocytes in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 47.

57. (Previously Presented) A method of inhibiting activation of lymphocytes in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 48.

58. (Previously Presented) A method of inhibiting activation of lymphocytes in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 49.

59. (Previously Presented) A method of inhibiting activation of lymphocytes in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 50.

60. (Previously Presented) A method of inhibiting activation of lymphocytes in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 51.

61. (Previously Presented) A method of inhibiting activation of lymphocytes in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 52.

62. (Previously Presented) A method of inhibiting activation of lymphocytes in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 53.

63. (Previously Presented) A method of inhibiting activation of lymphocytes in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 54.

64. (Previously Presented) A method of treating glomerulonephritis in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 46.

65. (Previously Presented) A method of treating glomerulonephritis in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 47.

66. (Previously Presented) A method of treating glomerulonephritis in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 48.

67. (Previously Presented) A method of treating glomerulonephritis in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 49.

68. (Previously Presented) A method of treating glomerulonephritis in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 50.

In re Appln. of Tamatani et al.
Application No. 09/383,551

69. (Previously Presented) A method of treating glomerulonephritis in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 51.

70. (Previously Presented) A method of treating glomerulonephritis in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 52.

71. (Previously Presented) A method of treating glomerulonephritis in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 53.

72. (Previously Presented) A method of treating glomerulonephritis in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 54.

19 ~~73~~. (Previously Presented) An isolated cell that produces the antibody of claim ~~38~~ 62

20 ~~74~~. (Previously Presented) An isolated cell that produces the antibody of claim ~~40~~ 64

21 ~~75~~. (Previously Presented) An isolated cell that produces the antibody of claim ~~41~~ 65

22 ~~76~~. (Previously Presented) An isolated cell that produces the antibody of claim ~~42~~ 66

23 ~~77~~. (Previously Presented) An isolated cell that produces the antibody of claim ~~43~~ 67

24 ~~78~~. (Previously Presented) An isolated cell that produces the antibody of claim ~~44~~ 68

25 ~~79~~. (Previously Presented) An isolated cell that produces the antibody of claim ~~45~~ 69

26/80. (Previously Presented) A purified chimeric, humanized or human monoclonal antibody or a portion thereof that binds to a polypeptide consisting of SEQ ID NO:2.

27/81. (Previously Presented) The antibody or portion thereof of claim 26/80, wherein the antibody binds to the extracellular region of the polypeptide.

28/82. (Previously Presented) The antibody or portion thereof of claim 26/80, wherein the antibody is chimeric.

29/83. (Previously Presented) The antibody or portion thereof of claim 26/80, wherein the antibody is humanized.

Il cont.

30/84. (Previously Presented) The antibody of claim 26/80, wherein the antibody is a human antibody.

31/85. (Previously Presented) A pharmaceutical composition comprising the antibody or portion thereof of claim 26/80 and a pharmaceutically acceptable carrier.

32/86. (Previously Presented) A pharmaceutical composition comprising the antibody or portion thereof of claim 27/81 and a pharmaceutically acceptable carrier.

33/87. (Previously Presented) A pharmaceutical composition comprising the antibody or portion thereof of claim 28/82 and a pharmaceutically acceptable carrier.

34/88. (Previously Presented) A pharmaceutical composition comprising the antibody or portion thereof of claim 29/83 and a pharmaceutically acceptable carrier.

35 89. (Previously Presented) A pharmaceutical composition comprising the antibody of claim 84 and a pharmaceutically acceptable carrier.
30

90. (Previously Presented) A method of inhibiting activation of lymphocytes in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 85.

91. (Previously Presented) A method of inhibiting activation of lymphocytes in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 86.

92. (Previously Presented) A method of inhibiting activation of lymphocytes in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 87.

93. (Previously Presented) A method of inhibiting activation of lymphocytes in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 88.

94. (Previously Presented) A method of inhibiting activation of lymphocytes in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 89.

95. (Previously Presented) A method of treating glomerulonephritis in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 85.

96. (Previously Presented) A method of treating glomerulonephritis in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 86.

97. (Previously Presented) A method of treating glomerulonephritis in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 87.

98. (Previously Presented) A method of treating glomerulonephritis in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 88.

99. (Previously Presented) A method of treating glomerulonephritis in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 89.

36 ~~100~~. (Previously Presented) An isolated cell that produces the antibody of claim ~~80~~ 26.

37 ~~101~~. (Previously Presented) An isolated cell that produces the antibody of claim ~~81~~ 27.

38 ~~102~~. (Previously Presented) An isolated cell that produces the antibody of claim ~~82~~ 28.

39 ~~103~~. (Previously Presented) An isolated cell that produces the antibody of claim ~~83~~ 29.

40 ~~104~~. (Previously Presented) An isolated hybridoma cell that produces the antibody of claim ~~84~~ 30.

41 ~~105~~. (Previously Presented) A process for producing a cell which secretes an antibody that binds to a polypeptide consisting of SEQ ID NO:2, comprising:

i) immunizing a mammal with an immunogen selected from the group consisting of:

a) an isolated polypeptide consisting of SEQ ID NO:2;

b) an isolated polypeptide comprising the extracellular region of SEQ ID NO:2;

c) an isolated homodimer molecule consisting of two polypeptide defined in a) or two polypeptides defined in b); and

d) a recombinant cell transfected with a DNA encoding a polypeptide consisting of SEQ ID NO:2, wherein the cell expresses the polypeptide;

ii) obtaining from the mammal cells that secrete antibodies, or generating from cells of the mammal cell lines that secrete antibodies; and

iii) identifying from the cells obtained in ii) or from the cell lines generated in ii) a cell that secretes an antibody that binds to a polypeptide consisting of SEQ ID NO:2.

Il cont.

42 ~~106~~. (Previously Presented) The process of claim ~~105~~ 41, wherein the antibody secreted by the cell identified in step iii) is a human antibody.

43 ~~107~~. (Previously Presented) The process of claim ~~105~~ 41, wherein the cell identified in step iii) is a hybridoma cell.

44 ~~108~~. (Previously Presented) The process of claim ~~105~~ 41, wherein the antibody secreted by the cell identified in step iii) binds to the extracellular region of the polypeptide consisting of SEQ ID NO:2.

45 ~~109~~. (Previously Presented) The process of claim ~~105~~ 41, wherein the mammal is a hamster.

46 ~~110~~. (Previously Presented) A process for producing an antibody that binds to a polypeptide consisting of SEQ ID NO:2, comprising providing a culture of the cell identified in claim ~~105~~ 41, and collecting the antibody from the culture.

In re Appln. of Tamatani et al.
Application No. 09/383,551

47 ~~111~~. (Previously Presented) A process for producing an antibody that binds to a polypeptide consisting of SEQ ID NO:2, comprising providing a culture of the cell identified in claim ~~106~~ 42, and collecting the antibody from the culture.

48 ~~112~~. (Previously Presented) A process for producing an antibody that binds to a polypeptide consisting of SEQ ID NO:2, comprising providing a culture of the cell identified in claim ~~107~~ 43, and collecting the antibody from the culture.

49 ~~113~~. (Previously Presented) A process for producing an antibody that binds to a polypeptide consisting of SEQ ID NO:2, comprising providing a culture of the cell identified in claim ~~108~~ 44, and collecting the antibody from the culture.

Il cont.

50 ~~114~~. (Previously Presented) A process for producing an antibody that binds to a polypeptide consisting of SEQ ID NO:2, comprising providing a culture of the cell identified in claim ~~109~~ 45, and collecting the antibody from the culture.

51 ~~140~~. (Previously Presented) A purified chimeric, humanized or human monoclonal antibody or a portion thereof that binds to a polypeptide consisting of SEQ ID NO:13.

52 ~~141~~. (Previously Presented) The antibody or portion thereof of claim ~~140~~ 51, wherein the antibody binds to the extracellular region of the polypeptide.

53 ~~142~~. (Previously Presented) The antibody or portion thereof of claim ~~140~~ 51, wherein the antibody is chimeric.

54 ~~143~~. (Previously Presented) The antibody or portion thereof of claim ~~140~~ 51, wherein the antibody is humanized.

55 ~~144.~~ (Previously Presented) The antibody of claim ~~140~~ 51, wherein the antibody is a human antibody.

56 ~~145.~~ (Previously Presented) A pharmaceutical composition comprising the antibody or portion thereof of claim ~~140~~ 51 and a pharmaceutically acceptable carrier.

57 ~~146.~~ (Previously Presented) A pharmaceutical composition comprising the antibody or portion thereof of claim ~~141~~ 52 and a pharmaceutically acceptable carrier.

58 ~~147.~~ (Previously Presented) A pharmaceutical composition comprising the antibody or portion thereof of claim ~~142~~ 53 and a pharmaceutically acceptable carrier.

59 ~~148.~~ (Previously Presented) A pharmaceutical composition comprising the antibody or portion thereof of claim ~~143~~ 54 and a pharmaceutically acceptable carrier.

$51 cont.

60 ~~149.~~ (Previously Presented) A pharmaceutical composition comprising the antibody of claim ~~144~~ 55 and a pharmaceutically acceptable carrier.

61 ~~150.~~ (Previously Presented) An isolated cell that produces the antibody of claim ~~140~~ 51.

62 ~~151.~~ (Previously Presented) An isolated cell that produces the antibody of claim ~~141~~ 52.

63 ~~152.~~ (Previously Presented) An isolated cell that produces the antibody of claim ~~142~~ 53.

64 ~~153.~~ (Previously Presented) An isolated cell that produces the antibody of claim ~~143~~ 54.

65 ~~154.~~ (Previously Presented) An isolated hybridoma cell that produces the antibody of claim ~~144~~ 55.

In re Appln. of Tamatani et al.
Application No. 09/385,551

66 ~~165~~. (Previously Presented) A purified non-hamster antibody or portion thereof that binds to a polypeptide consisting of SEQ ID NO:14.

67 ~~166~~. (Previously Presented) The antibody or portion thereof of claim ~~165~~ 66, wherein the antibody is monoclonal.

68 ~~167~~. (Previously Presented) The antibody or portion thereof of claim ~~165~~ 66, wherein the antibody is polyclonal.

69 ~~168~~. (Previously Presented) The antibody or portion thereof of claim ~~166~~ 67, wherein the antibody binds to the extracellular region of the polypeptide.

70 ~~169~~. (Previously Presented) The antibody or portion thereof of claim ~~166~~ 67, wherein the antibody is a human, rat, guinea pig, rabbit, dog, cat, pig, goat, horse or cow antibody.

71 ~~170~~. (Previously Presented) The antibody or portion thereof of claim ~~166~~ 67, wherein the antibody is a human, rat or guinea pig antibody.

72 ~~171~~. (Previously Presented) The antibody or portion thereof of claim ~~166~~ 67, wherein the antibody is chimeric.

73 ~~172~~. (Previously Presented) The antibody or portion thereof of claim ~~166~~ 67, wherein the antibody is humanized.

74 ~~173~~. (Previously Presented) The antibody or portion thereof of claim ~~166~~ 67, wherein the antibody is a human antibody.

75 ~~174~~. (Previously Presented) A pharmaceutical composition comprising the antibody or portion thereof of claim ~~165~~ 66 and a pharmaceutically acceptable carrier.

In re Appln. of Tamatani et al.
Application No. 09/383,551

76 ~~175.~~ (Previously Presented) A pharmaceutical composition comprising the antibody or portion thereof of claim ~~166~~ 67 and a pharmaceutically acceptable carrier.

77 ~~176.~~ (Previously Presented) A pharmaceutical composition comprising the antibody or portion thereof of claim ~~167~~ 68 and a pharmaceutically acceptable carrier.

78 ~~177.~~ (Previously Presented) A pharmaceutical composition comprising the antibody or portion thereof of claim ~~168~~ 69 and a pharmaceutically acceptable carrier.

79 ~~178.~~ (Previously Presented) A pharmaceutical composition comprising the antibody or portion thereof of claim ~~169~~ 70 and a pharmaceutically acceptable carrier.

II cont.

80 ~~179.~~ (Previously Presented) A pharmaceutical composition comprising the antibody or portion thereof of claim ~~170~~ 71 and a pharmaceutically acceptable carrier.

81 ~~180.~~ (Previously Presented) A pharmaceutical composition comprising the antibody or portion thereof of claim ~~171~~ 72 and a pharmaceutically acceptable carrier.

82 ~~181.~~ (Previously Presented) A pharmaceutical composition comprising the antibody or portion thereof of claim ~~172~~ 73 and a pharmaceutically acceptable carrier.

83 ~~182.~~ (Previously Presented) A pharmaceutical composition comprising the antibody or portion thereof of claim ~~173~~ 74 and a pharmaceutically acceptable carrier.

84 ~~183.~~ (Previously Presented) An isolated cell that produces the antibody of claim ~~166~~ 67.

85 ~~184.~~ (Previously Presented) An isolated cell that produces the antibody of claim ~~168~~ 69.

In re Appln. of Tamatani et al.
Application No. 09/383,551

86 ~~185.~~ (Previously Presented) An isolated cell that produces the antibody of claim ~~169~~ 70.

87 ~~186.~~ (Previously Presented) An isolated cell that produces the antibody of claim ~~170~~ 71.

88 ~~187.~~ (Previously Presented) An isolated cell that produces the antibody of claim ~~171~~ 72.

89 ~~188.~~ (Previously Presented) An isolated cell that produces the antibody of claim ~~172~~ 73.

90 ~~189.~~ (Previously Presented) An isolated cell that produces the antibody of claim ~~173~~ 74.

91 ~~190.~~ (Previously Presented) A purified chimeric, humanized or human monoclonal antibody or a portion thereof that binds to a polypeptide consisting of SEQ ID NO:14.

92 ~~191.~~ (Previously Presented) The antibody or portion thereof of claim ~~190~~ 91, wherein the antibody binds to the extracellular region of the polypeptide.

93 ~~192.~~ (Previously Presented) The antibody or portion thereof of claim ~~190~~ 91, wherein the antibody is chimeric.

94 ~~193.~~ (Previously Presented) The antibody or portion thereof of claim ~~190~~ 91, wherein the antibody is humanized.

95 ~~194.~~ (Previously Presented) The antibody of claim ~~190~~ 91, wherein the antibody is a human antibody.

96 ~~195.~~ (Previously Presented) A pharmaceutical composition comprising the antibody or portion thereof of claim ~~190~~ 91 and a pharmaceutically acceptable carrier.

II cont.

97 ~~196~~. (Previously Presented) A pharmaceutical composition comprising the antibody or portion thereof of claim ~~191~~ 92 and a pharmaceutically acceptable carrier.

98 ~~197~~. (Previously Presented) A pharmaceutical composition comprising the antibody or portion thereof of claim ~~192~~ 93 and a pharmaceutically acceptable carrier.

99 ~~198~~. (Previously Presented) A pharmaceutical composition comprising the antibody or portion thereof of claim ~~193~~ 94 and a pharmaceutically acceptable carrier.

100 ~~199~~. (Previously Presented) A pharmaceutical composition comprising the antibody of claim ~~194~~ 95 and a pharmaceutically acceptable carrier.

II cont.

101 ~~200~~. (Previously Presented) An isolated cell that produces the antibody of claim ~~190~~ 91.

102 ~~201~~. (Previously Presented) An isolated cell that produces the antibody of claim ~~191~~ 92.

103 ~~202~~. (Previously Presented) An isolated cell that produces the antibody of claim ~~192~~ 93.

104 ~~203~~. (Previously Presented) An isolated cell that produces the antibody of claim ~~193~~ 94.

105 ~~204~~. (Previously Presented) An isolated hybridoma cell that produces the antibody of claim ~~194~~ 95.

106 ~~205~~. (Previously Presented) A process for producing a cell which secretes an antibody that binds to a polypeptide consisting of SEQ ID NO:14, comprising:

i) immunizing a mammal with an immunogen selected from the group consisting of:

a) an isolated polypeptide consisting of SEQ ID NO:14;

b) an isolated polypeptide comprising the extracellular region of SEQ ID NO:14;

c) an isolated homodimer molecule consisting of two polypeptide defined in a) or two polypeptides defined in b); and

d) a recombinant cell transfected with a DNA encoding a polypeptide consisting of SEQ ID NO:14, wherein the cell expresses the polypeptide;

ii) obtaining from the mammal cells that secrete antibodies, or generating from cells of the mammal cell lines that secrete antibodies; and

iii) identifying from the cells obtained in ii) or from the cell lines generated in ii) a cell that secretes an antibody that binds to a polypeptide consisting of SEQ ID NO:14.

107 ~~206~~. (Previously Presented) The process of claim ~~205~~ 106, wherein the antibody secreted by the cell identified in step iii) is a human antibody.

108 ~~207~~. (Previously Presented) The process of claim ~~205~~ 106, wherein the cell identified in step iii) is a hybridoma cell.

109 ~~208~~. (Previously Presented) The process of claim ~~205~~ 106, wherein the antibody secreted by the cell identified in step iii) binds to the extracellular region of the polypeptide consisting of SEQ ID NO:14.

110 ~~209~~. (Previously Presented) The process of claim ~~205~~ 106, wherein the mammal is a hamster.

111 ~~210~~. (Previously Presented) A process for producing an antibody that binds to a polypeptide consisting of SEQ ID NO:14, comprising providing a culture of the cell identified in claim ~~205~~ 106, and collecting the antibody from the culture.

112 ~~211~~. (Previously Presented) A process for producing an antibody that binds to a polypeptide consisting of SEQ ID NO:14, comprising providing a culture of the cell identified in claim ~~206~~ 107, and collecting the antibody from the culture.

In re Appln. of Tamatani et al.
Application No. 09/383,551

U3 ~~212~~. (Previously Presented) A process for producing an antibody that binds to a polypeptide consisting of SEQ ID NO:14, comprising providing a culture of the cell identified in claim ~~207~~ 108, and collecting the antibody from the culture.

I1 cont. 114 ~~213~~. (Previously Presented) A process for producing an antibody that binds to a polypeptide consisting of SEQ ID NO:14, comprising providing a culture of the cell identified in claim ~~208~~ 109, and collecting the antibody from the culture.

115 ~~214~~. (Previously Presented) A process for producing an antibody that binds to a polypeptide consisting of SEQ ID NO:14, comprising providing a culture of the cell identified in claim ~~209~~ 110, and collecting the antibody from the culture.

215. (New) A purified antibody that binds to a polypeptide consisting of SEQ ID NO:2, wherein the antibody is a human, mouse, rat, guinea pig, rabbit, dog, cat, pig, goat, horse or cow antibody.

216. (New) The antibody of claim 215, wherein the antibody is monoclonal.

I

217. (New) The antibody of claim 215, wherein the antibody is polyclonal.

218. (New) The antibody of claim 215, wherein the antibody binds to the extracellular region of the polypeptide.

219. (New) The antibody of claim 215, wherein the antibody is a human, mouse or rat antibody.

220. (New) The antibody of claim 215, wherein the antibody is chimeric.

221. (New) The antibody of claim 215, wherein the antibody is humanized.

222. (New) The antibody of claim 215, wherein the antibody is a human antibody.

223. (New) The antibody of claim 216, wherein the antibody binds to the extracellular region of the polypeptide.

224. (New) The antibody of claim 216, wherein the antibody is a human, mouse or rat antibody.

225. (New) The antibody of claim 216, wherein the antibody is chimeric.

226. (New) The antibody of claim 216, wherein the antibody is humanized.

227. (New) The antibody of claim 216, wherein the antibody is a human antibody.

228. (New) A pharmaceutical composition comprising the antibody of claim 215 and a pharmaceutically acceptable carrier.

229. (New) A pharmaceutical composition comprising the antibody of claim 216 and a pharmaceutically acceptable carrier.

230. (New) A pharmaceutical composition comprising the antibody of claim 217 and a pharmaceutically acceptable carrier.

231. (New) A pharmaceutical composition comprising the antibody of claim 218 and a pharmaceutically acceptable carrier.

232. (New) A pharmaceutical composition comprising the antibody of claim 219 and a pharmaceutically acceptable carrier.

233. (New) A pharmaceutical composition comprising the antibody of claim 220 and a pharmaceutically acceptable carrier.

234. (New) A pharmaceutical composition comprising the antibody of claim 221 and a pharmaceutically acceptable carrier.

235. (New) A pharmaceutical composition comprising the antibody of claim 222 and a pharmaceutically acceptable carrier.

236. (New) A pharmaceutical composition comprising the antibody of claim 223 and a pharmaceutically acceptable carrier.

237. (New) A pharmaceutical composition comprising the antibody of claim 224 and a pharmaceutically acceptable carrier.

238. (New) A pharmaceutical composition comprising the antibody of claim 225 and a pharmaceutically acceptable carrier.

239. (New) A pharmaceutical composition comprising the antibody of claim 226 and a pharmaceutically acceptable carrier.

240. (New) A pharmaceutical composition comprising the antibody of claim 227 and a pharmaceutically acceptable carrier.

241. (New) A method of inhibiting activation of lymphocytes in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 228.

242. (New) A method of inhibiting activation of lymphocytes in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 229.

243. (New) A method of inhibiting activation of lymphocytes in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 230.

244. (New) A method of inhibiting activation of lymphocytes in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 231.

245. (New) A method of inhibiting activation of lymphocytes in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 232.

246. (New) A method of inhibiting activation of lymphocytes in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 233.

247. (New) A method of inhibiting activation of lymphocytes in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 234.

248. (New) A method of inhibiting activation of lymphocytes in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 235.

249. (New) A method of inhibiting activation of lymphocytes in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 236.

250. (New) A method of inhibiting activation of lymphocytes in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 237.

251. (New) A method of inhibiting activation of lymphocytes in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 238.

252. (New) A method of inhibiting activation of lymphocytes in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 239.

253. (New) A method of inhibiting activation of lymphocytes in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 240.

254. (New) A method of treating glomerulonephritis in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 228.

255. (New) A method of treating glomerulonephritis in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 229.

256. (New) A method of treating glomerulonephritis in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 230.

257. (New) A method of treating glomerulonephritis in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 231.

258. (New) A method of treating glomerulonephritis in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 232.

259. (New) A method of treating glomerulonephritis in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 233.

260. (New) A method of treating glomerulonephritis in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 234.

261. (New) A method of treating glomerulonephritis in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 235.

262. (New) A method of treating glomerulonephritis in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 236.

263. (New) A method of treating glomerulonephritis in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 237.

264. (New) A method of treating glomerulonephritis in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 238.

265. (New) A method of treating glomerulonephritis in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 239.

266. (New) A method of treating glomerulonephritis in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 240.

267. (New) An isolated cell that produces the antibody of claim 216.

268. (New) An isolated cell that produces the antibody of claim 218.

269. (New) An isolated cell that produces the antibody of claim 219.

270. (New) An isolated cell that produces the antibody of claim 220.

271. (New) An isolated cell that produces the antibody of claim 221.

272. (New) An isolated cell that produces the antibody of claim 222.

273. (New) An isolated cell that produces the antibody of claim 223.

274. (New) An isolated cell that produces the antibody of claim 224.

275. (New) An isolated cell that produces the antibody of claim 225.

276. (New) An isolated cell that produces the antibody of claim 226.

277. (New) An isolated cell that produces the antibody of claim 227.

278. (New) A purified chimeric, humanized or human monoclonal antibody that binds to a polypeptide consisting of SEQ ID NO:2.

279. (New) The antibody of claim 278, wherein the antibody binds to the extracellular region of the polypeptide.

280. (New) The antibody of claim 278, wherein the antibody is chimeric.

281. (New) The antibody of claim 278, wherein the antibody is humanized.

282. (New) The antibody of claim 278, wherein the antibody is a human antibody.

283. (New) A pharmaceutical composition comprising the antibody of claim 278 and a pharmaceutically acceptable carrier.

284. (New) A pharmaceutical composition comprising the antibody of claim 279 and a pharmaceutically acceptable carrier.

285. (New) A pharmaceutical composition comprising the antibody of claim 280 and a pharmaceutically acceptable carrier.

286. (New) A pharmaceutical composition comprising the antibody of claim 281 and a pharmaceutically acceptable carrier.

287. (New) A pharmaceutical composition comprising the antibody of claim 282 and a pharmaceutically acceptable carrier.

288. (New) A method of inhibiting activation of lymphocytes in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 283.

289. (New) A method of inhibiting activation of lymphocytes in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 284.

290. (New) A method of inhibiting activation of lymphocytes in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 285.

291. (New) A method of inhibiting activation of lymphocytes in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 286.

292. (New) A method of inhibiting activation of lymphocytes in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 287.

293. (New) A method of treating glomerulonephritis in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 283.

294. (New) A method of treating glomerulonephritis in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 284.

295. (New) A method of treating glomerulonephritis in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 285.

296. (New) A method of treating glomerulonephritis in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 286.

297. (New) A method of treating glomerulonephritis in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 287.

298. (New) An isolated cell that produces the antibody of claim 278.

299. (New) An isolated cell that produces the antibody of claim 279.

300. (New) An isolated cell that produces the antibody of claim 280.

301. (New) An isolated cell that produces the antibody of claim 281.

302. (New) An isolated cell that produces the antibody of claim 282.

303. (New) A method of inhibiting the transmission of a costimulatory signal of lymphocytes, the method comprising administering to a subject a pharmaceutical composition comprising a pharmaceutically acceptable carrier and an antibody that binds to a polypeptide consisting of SEQ ID NO:2.

304. (New) The method of claim 303, wherein the antibody is monoclonal.

305. (New) The method of claim 303, wherein the antibody is polyclonal.

306. (New) The method of claim 303, wherein the antibody binds to the extracellular region of the polypeptide.

307. (New) The method of claim 303, wherein the antibody is a human, mouse, rat, guinea pig, rabbit, dog, cat, pig, goat, horse, or cow antibody.

308. (New) The method of claim 303, wherein the antibody is chimeric.

309. (New) The method of claim 303, wherein the antibody is humanized.

310. (New) The method of claim 303, wherein the antibody is a human antibody.

311. (New) The method of claim 304, wherein the antibody binds to the extracellular region of polypeptide.

312. (New) The method of claim 305, wherein the antibody is a human, mouse, rat, guinea pig, rabbit, dog, cat, pig, goat, horse, or cow antibody.

313. (New) The method of claim 305, wherein the antibody is chimeric.

314. (New) The method of claim 305, wherein the antibody is humanized.

315. (New) The method of claim 305, wherein the antibody is a human antibody.

316. (New) A purified fragment of a human, mouse, rat, guinea pig, rabbit, dog, cat, pig, goat, horse or cow antibody, wherein the antibody fragment is selected from the group consisting of an $F(ab')_2$, an Fab', an Fab, an Fv, an sFv, and an dsFv antibody fragment and wherein the antibody fragment binds to a polypeptide consisting of SEQ ID NO:2.

317. (New) The antibody fragment of claim 316, wherein the antibody is monoclonal.

318. (New) The antibody fragment of claim 316, wherein the antibody is polyclonal.

319. (New) The antibody fragment of claim 316, wherein the antibody fragment binds to the extracellular region of the polypeptide.

320. (New) The antibody fragment of claim 316, wherein the antibody is a human, mouse or rat antibody.

321. (New) The antibody fragment of claim 316, wherein the antibody is chimeric.

322. (New) The antibody fragment of claim 316, wherein the antibody is humanized.

323. (New) The antibody fragment of claim 316, wherein the antibody is a human antibody.

324. (New) The antibody fragment of claim 317, wherein the antibody fragment binds to the extracellular region of the polypeptide.

325. (New) The antibody fragment of claim 317, wherein the antibody is a human, mouse or rat antibody.

326. (New) The antibody fragment of claim 317, wherein the antibody is chimeric.

327. (New) The antibody fragment of claim 317, wherein the antibody is humanized.

328. (New) The antibody fragment of claim 317, wherein the antibody is a human antibody.

329. (New) A pharmaceutical composition comprising the antibody fragment of claim 316 and a pharmaceutically acceptable carrier.

330. (New) A pharmaceutical composition comprising the antibody fragment of claim 317 and a pharmaceutically acceptable carrier.

331. (New) A pharmaceutical composition comprising the antibody fragment of claim 318 and a pharmaceutically acceptable carrier.

332. (New) A pharmaceutical composition comprising the antibody fragment of claim 319 and a pharmaceutically acceptable carrier.

333. (New) A pharmaceutical composition comprising the antibody fragment of claim 320 and a pharmaceutically acceptable carrier.

334. (New) A pharmaceutical composition comprising the antibody fragment of claim 321 and a pharmaceutically acceptable carrier.

335. (New) A pharmaceutical composition comprising the antibody fragment of claim 322 and a pharmaceutically acceptable carrier.

336. (New) A pharmaceutical composition comprising the antibody fragment of claim 323 and a pharmaceutically acceptable carrier.

337. (New) A pharmaceutical composition comprising the antibody fragment of claim 324 and a pharmaceutically acceptable carrier.

338. (New) A pharmaceutical composition comprising the antibody fragment of claim 325 and a pharmaceutically acceptable carrier.

339. (New) A pharmaceutical composition comprising the antibody fragment of claim 326 and a pharmaceutically acceptable carrier.

340. (New) A pharmaceutical composition comprising the antibody fragment of claim 327 and a pharmaceutically acceptable carrier.

341. (New) A pharmaceutical composition comprising the antibody fragment of claim 328 and a pharmaceutically acceptable carrier.

342. (New) A method of inhibiting activation of lymphocytes in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 329.

343. (New) A method of inhibiting activation of lymphocytes in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 330.

344. (New) A method of inhibiting activation of lymphocytes in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 331.

345. (New) A method of inhibiting activation of lymphocytes in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 332.

346. (New) A method of inhibiting activation of lymphocytes in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 333.

347. (New) A method of inhibiting activation of lymphocytes in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 334.

348. (New) A method of inhibiting activation of lymphocytes in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 335.

349. (New) A method of inhibiting activation of lymphocytes in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 336.

350. (New) A method of inhibiting activation of lymphocytes in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 337.

351. (New) A method of inhibiting activation of lymphocytes in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 338.

352. (New) A method of inhibiting activation of lymphocytes in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 339.

353. (New) A method of inhibiting activation of lymphocytes in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 340.

354. (New) A method of inhibiting activation of lymphocytes in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 341.

355. (New) A method of inhibiting the transmission of a costimulatory signal of lymphocytes, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 329.

356. (New) A method of inhibiting the transmission of a costimulatory signal of lymphocytes, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 330.

357. (New) A method of inhibiting the transmission of a costimulatory signal of lymphocytes, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 331.

358. (New) A method of inhibiting the transmission of a costimulatory signal of lymphocytes, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 332.

359. (New) A method of inhibiting the transmission of a costimulatory signal of lymphocytes, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 333.

360. (New) A method of inhibiting the transmission of a costimulatory signal of lymphocytes, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 334.

361. (New) A method of inhibiting the transmission of a costimulatory signal of lymphocytes, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 335.

362. (New) A method of inhibiting the transmission of a costimulatory signal of lymphocytes, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 336.

363. (New) A method of inhibiting the transmission of a costimulatory signal of lymphocytes, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 337.

364. (New) A method of inhibiting the transmission of a costimulatory signal of lymphocytes, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 338.

365. (New) A method of inhibiting the transmission of a costimulatory signal of lymphocytes, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 339.

366. (New) A method of inhibiting the transmission of a costimulatory signal of lymphocytes, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 340.

367. (New) A method of inhibiting the transmission of a costimulatory signal of lymphocytes, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 341.

368. (New) A method of treating glomerulonephritis in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 329.

369. (New) A method of treating glomerulonephritis in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 330.

370. (New) A method of treating glomerulonephritis in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 331.

371. (New) A method of treating glomerulonephritis in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 332.

372. (New) A method of treating glomerulonephritis in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 333.

373. (New) A method of treating glomerulonephritis in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 334.

374. (New) A method of treating glomerulonephritis in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 335.

375. (New) A method of treating glomerulonephritis in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 336.

376. (New) A method of treating glomerulonephritis in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 337.

377. (New) A method of treating glomerulonephritis in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 338.

378. (New) A method of treating glomerulonephritis in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 339.

379. (New) A method of treating glomerulonephritis in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 340.

380. (New) A method of treating glomerulonephritis in a subject, the method comprising administering to the subject an effective amount of the pharmaceutical composition of claim 341.

381. (New) An isolated cell that produces the antibody fragment of claim 317.

382. (New) An isolated cell that produces the antibody fragment of claim 319.

383. (New) An isolated cell that produces the antibody fragment of claim 320.

384. (New) An isolated cell that produces the antibody fragment of claim 321.

385. (New) An isolated cell that produces the antibody fragment of claim 322.

386. (New) An isolated cell that produces the antibody fragment of claim 323.

387. (New) An isolated cell that produces the antibody fragment of claim 324.

388. (New) An isolated cell that produces the antibody fragment of claim 325.

389. (New) An isolated cell that produces the antibody fragment of claim 326.

390. (New) An isolated cell that produces the antibody fragment of claim 327.

391. (New) An isolated cell that produces the antibody fragment of claim 328